

CLAIMS:

- Claim 1. A powder-free elastomeric article, the article comprising:
an elastomeric material having a first surface and a second surface;
the first surface of the elastomeric material coated with a powder-free
coagulant coating;
the powder-free coagulant composition comprising:
micronized high-density polyethylene;
a micro-emulsion of amino silicone;
a dimethicone emulsion;
an ethoxylated acetylenic diol surfactant; and
a cellulose thickener; and
the second surface of the elastomeric material coated with a polymer
coating.
- Claim 2. The article of claim 1 wherein said article is a glove.
- Claim 3. The article of claim 2 wherein the elastomeric material is selected from the
group consisting of polychloroprene, natural rubber, synthetic polyisoprene, carboxylated
acrylonitrile butadiene and polyurethane.
- Claim 4. The article of claim 3 wherein the elastomeric material is compounded with
standard curatives.
- Claim 5. The article of claim 4 wherein the second surface is halogenated.
- Claim 6. An antiblocking coagulant composition for use in making a powder-free
elastomeric article, the coagulant comprising:
micronized high-density polyethylene;
a micro-emulsion of amino silicone;
a dimethicone emulsion;
calcium salts;
an ethoxylated acetylenic diol surfactant; and

a cellulose thickener.

Claim 7. The antiblocking coagulant composition of claim 6 wherein the micronized high-density polyethylene has an average melting point of between about 100 and about 130 degrees centigrade and an average particle size of between about 2 and about 12 microns.

Claim 8. The antiblocking coagulant composition of claim 6 wherein the micro-emulsion of amino silicone includes mixed particles ranging in size from about 1 to about 100 microns.

Claim 9. The antiblocking coagulant composition of claim 6 wherein the dimethicone is emulsified from a polydimethyl siloxane fluid source with a viscosity ranging from about 10,000 to about 100,000 centistokes.

Claim 10. The antiblocking coagulant composition of claim 6 further comprising cyclomethicone.

Claim 11. The antiblocking coagulant composition of claim 10 wherein the dimethicone in combination with the cyclomethicone is emulsified from a polydimethyl siloxane fluid source with a viscosity ranging from about 10,000 to about 100,000 centistokes.

Claim 12. The antiblocking coagulant composition of claim 6 further comprising a total solids content of the following:

- between about 10% and about 30% calcium salts;
- between about 0.1% and about 3% micronized HDPE;
- between about 0.1% and about 3% micro-emulsion of amino silicone;
- between about 0% and about 1% of dimethicone emulsion;
- between about 0% and about 0.5% cellulose thickener; and
- between about 0.1% and about 0.5% non-ionic acetylenic diol surfactant.

Claim 13. A method for making powder-free articles comprising the steps of:

forming a first layer of said article by dipping a former into a bath of the antiblocking coagulant of claim 6;

forming a second layer over the first layer by dipping the former into a modified elastomeric material;

gelling the second layer;

leaching the gelled layer to remove soluble non-rubber or non-latex constituents;

priming the second layer with a solution having a low concentration of salts;

forming a third layer over the second layer by dipping the former into a polymer coating;

drying the third layer;

subjecting the formed layers to heat of between about 120 and about 160 degrees centigrade; and

post-leaching the cured formed layers.

Claim 14. The method of claim 13 wherein the former is dipped into the antiblocking coagulant at a temperature of between about 20 and about 40 degrees centigrade.

Claim 15. A powder-free elastomeric article made by the process of claim 13.

Claim 16. The article of claim 15 wherein said article is a glove.